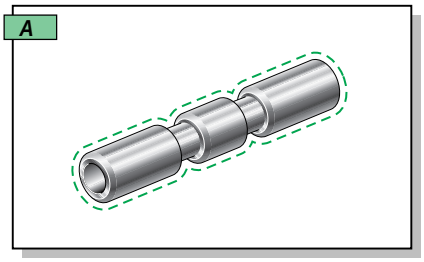
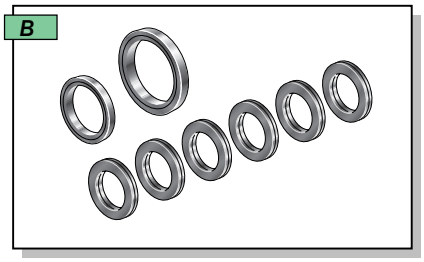
BUILDING FEATURES / *CARATTERISTICHE COSTRUTTIVE*

VESTA valves and solenoid valves with connections **G1/8**,**G1/4** and **G1/2** are available in the 3/2, 5/2 and 5/3 versions, with different forms of actuation (i.e. solenoid / pilot etc).
The choice of high quality materials and the technical solution adopted allows to the valves to reach a good performance even in harsh environmental conditions.
The spool, made by a light alloy aluminium, nickel trated by Niploy Process (see fig. **A**) to give its surface a smooth finisch and a better resistace to aggressive agent.
Its particular shape allows high nominal flow rates (see fig. **D**), and the combination with self lubricating lip ruber seals (see fig. **B**), reduce internal friction (see fig. **C**) and provides the valve with a long lasting durable life spar.
Valves and Solenoid valves with connections **G1/8**; **G1/4** and **G1/2** can operate continuosly without lubrication (see fig. **E**) and are sealed against working environment.

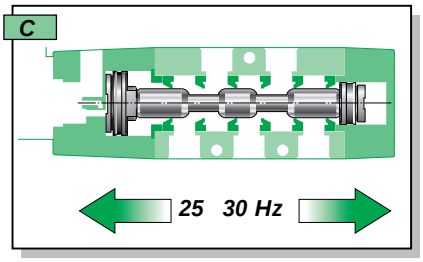
*Le valvole ed elettrovalvole VESTA con connessioni **G1/8**; **G1/4** e **G1/2** sono disponibili nelle versioni 3/2, 5/2 e 5/3 con più sistemi di attuazione e riposizionamento.*
Le soluzioni tecniche adottate ed i materiali impiegati hanno permesso di realizzare un prodotto che presenta elevate prestazioni funzionali anche in condizioni di impiego particolarmente gravose.
*La spola, costruita in lega leggera e progettata per consentire elevate portate nominali (**D**),viene trattata superficialmente al nickel (Niploy Process) (**A**)onde acquisire una durezza maggiore ed una più elevata resistenza agli agenti aggressivi.*
*La combinazione tra la spola e le guarnizioni in elastomero nitrilico con profilo del labbro antiusura (**B**), permette, accanto ad una riduzione degli attriti, un' alta velocità di scambio e cicli di lavoro elevati (**C**), garantendo una maggiore durata della meccanica interna.*
*Tutti i modelli di valvole con connessioni **G1/8**; **G1/4** e **G1/2** possono essere utilizzati anche in assenza di lubrificazione (**E**).*
*L'ermeticità di funzionamento verso l'ambiente di lavoro ne fa inoltre un prodotto adatto all'impiego in settori cosiddetti "difficili" (**F**).*
Nelle pagine che seguono tutte le caratteristiche funzionali di ciascuna valvola sono convalidate dal Dipartimento di Meccanica del Politecnico di Torino.



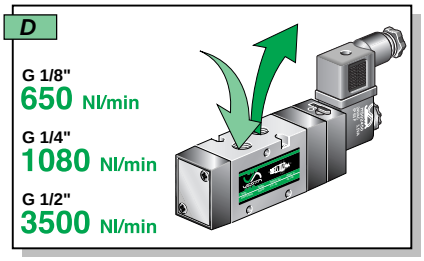
Light alloy spool with Niploy Process trated surface.
Spola in lega leggera con trattamento superficiale Niploy Process.



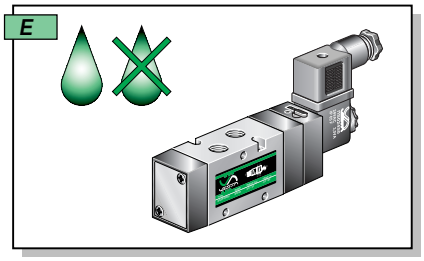
Self lubricating lip rubber seals.
Guarnizioni in elastomero nitrilico con profilo del labbro antiusura.



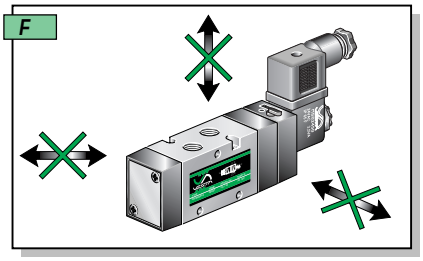
High working frequency.
Alta velocità di scambio per cicli di lavoro elevati.



High nominal air flow.
Alta portata nominale.



Possibility of operating continuosly without lubrication.
Possibilità di funzionamento continuo privo di lubrificazione.



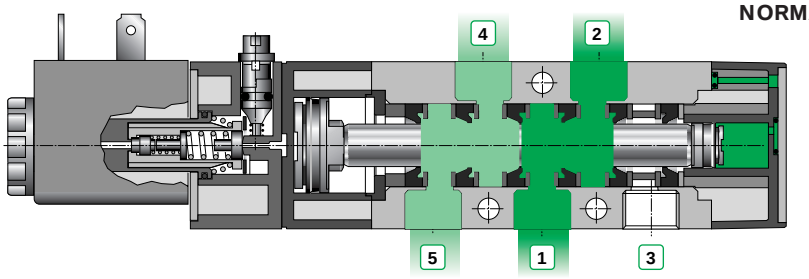
Sealed against working environment.
Ermeticità di funzionamento verso l'ambiente di lavoro.

WORKING PRINCIPLE / *PRINCIPIO DI FUNZIONAMENTO*

In the example here below, when the 5/2 valve **E52W1S018 - 02450** stands in the normal position, ports **4** - **5** and **1**- **2** are connected and the position is kept thanks to the pressure assured to the smallest piston (right side of the valve). When the valve is actuated, the same pressure is fed to the biggest piston. It's bigger surface create a force which allows to the spool to move and therefore to connect ports **4** - **1** and **2** - **3**.
In the mechanical spring version, the valve is kept in the normal position by a mechanical spring.
In the bistable versions, the position of the valve remains in its last switched state.

*Il principio di funzionamento del distributore 5/2 (nell'esempio la valvola a comando elettropneumatico e riposizionamento a molla pneumatica **E52W1S018 - 02450**) consiste nel mantenere costantemente in pressione il pistone di riposizionamento (fig. **1**), utilizzando la fonte d'aria compressa presente nel condotto di alimentazione **1**, collegando le vie **1- 2** e **4 - 5**.*
*L' eccitazione del solenoide mette in comunicazione il condotto in pressione **1** con la camera dove é alloggiato il pistone di comando. Quest'ultimo, avendo un'area di spinta maggiore del pistone di riposizionamento, sposta la spola in modo tale da collegare i canali **1- 4** e **2- 3** (fig. **2**). Diseccitando il solenoide si ripristina la posizione iniziale.*
Nei sistemi bistabili (doppio comando elettropneumatico o doppio comando pneumatico) in assenza di segnale rimangono i collegamenti dell'ultimo azionamento.

NORMAL POSITION - *POSIZIONE A RIPOSO*



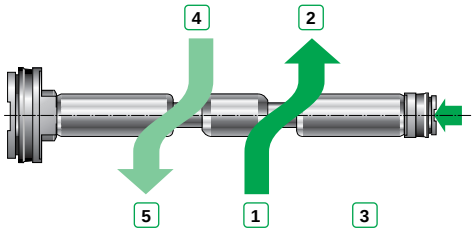
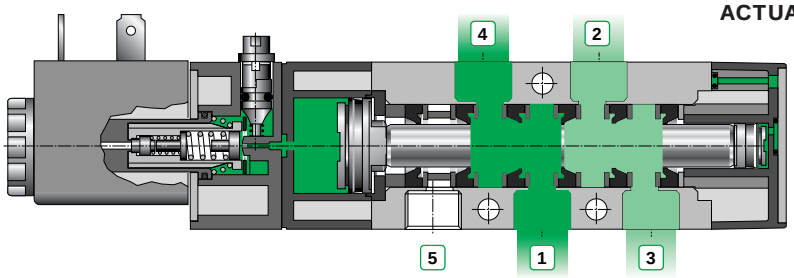


fig. 1

ACTUATED POSITION - *POSIZIONE DI LAVORO*



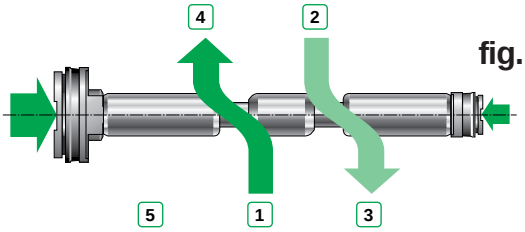
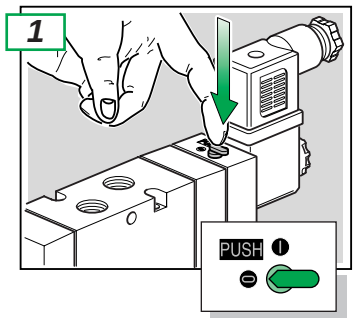


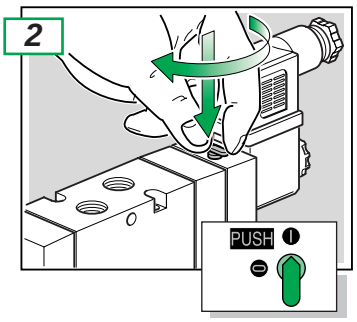
fig. 2

MANUAL OVERRIDING / *AZIONAMENTO COMANDO MANUALE*



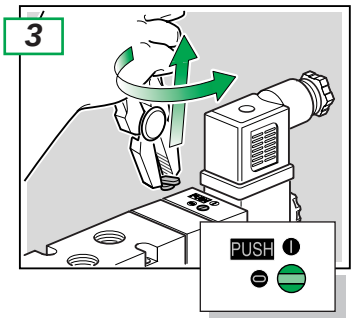
Push to actuated valve without locking. ***Relise the button to get back to normal position.***

Per azionare la valvola, durante la fase di collaudo con pressione in linea senza collegamento elettrico, premere la leva del comando manuale. ***Rilasciare per ripristinare la condizione di riposo.***



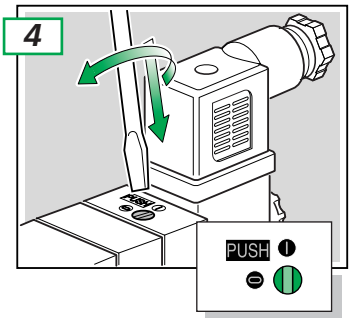
To active the valve permanently push the M/O (manual override) and rotate clockwise 90°. ***To return to normal position, push the M/O again and turn 90° anti-clockwise.***

Per azionare la valvola in modo permanente premere la leva del comando manuale e ruotare in senso orario sino alla posizione 1. ***Ruotare in senso antiorario per ripristinare la condizione di riposo.***



Should the M/O no longer be required, then turn the M/O anticlockwise until it breaks off.

Terminato il collaudo ruotare in senso antiorario la leva sino alla rottura.



Should the M/O be required after breaking off, then a screwdriver may be used.

*Per interventi successivi sul comando manuale usare un adeguato cacciavite ed operare come al punto **1** o **2**.*

SERIE **G1/8, G1/4, G1/2**

VALVES AND SOLENOID VALVES "E" SERIES
VALVOLE ED ELETTROVALVOLE SERIE "E"

COMMON FEATURES VALVES G1/8 SERIES / *CARATTERISTICHE COMUNI VALVOLE SERIE G1/8*

Port connections	G1/8
Pilot connections	G1/8
Flow section	Ø 6 mm
Environment temperature range	-10 °C ÷ +50 °C
Temperature range of medium	0 °C ÷ +40 °C
Lubrication	Not required
Medium	Filtered air
Reference temperature	+20 °C
Reference pressure	6 bar

3/2 VALVES AND SOLENOID VALVES

Fixing	n°3 holes Ø 4,25 manifold system see p. 26.
Nominal air flow	650 Nl/min
Fluid conductance "C"	2,7 Nl/s bar
Critical pressure ratio "b"	0,203

5/2 VALVES AND SOLENOID VALVES

Fixing	n°3 holes Ø 4,25 manifold system pp. 24 ÷ 26.
Nominal air flow	650 Nl/min
Fluid conductance "C"	2,7 Nl/s bar
Critical pressure ratio "b"	0,203

5/3 VALVES AND SOLENOID VALVES

Fixing	n°3 holes Ø 4,25 manifold system pp. 24 ÷ 26.
Nominal air flow	530 Nl/min
Fluid conductance "C"	2,17 Nl/s bar
Critical pressure ratio "b"	0,236

Connessioni di lavoro	***G1/8***
Connessioni operatori	*G1/8*
Diametro nominale	*Ø 6 mm*
Temperatura ambiente	*-10 °C ÷ +50 °C*
Temperatura fluido	*0 °C ÷ +40 °C*
Lubrificazione	*Non necessaria*
Fluido	*Aria filtrata*
Temperatura nominale	*+20 °C*
Pressione nominale	*6 bar*

VALVOLE ED ELETTROVALVOLE 3/2

Fissaggio	*n°3 fori laterali Ø 4,25 su collettore vedi p. 26*
Portata nominale	*650 Nl/min*
Valore conduttanza "C"	*2,7 Nl/s bar*
Rapporto critico delle pressioni "b"	*0,203*

VALVOLE ED ELETTROVALVOLE 5/2

Fissaggio su base vedi pp. 24 ÷ 25	*n°3 fori laterali Ø 4,25 su collettore vedi p. 26*
Portata nominale	*650 Nl/min*
Valore conduttanza "C"	*2,7 Nl/s bar*
Rapporto critico delle pressioni "b"	*0,203*

VALVOLE ED ELETTROVALVOLE 5/3

Fissaggio su base vedi pp. 24 ÷ 25	*n°3 fori laterali Ø 4,25 su collettore vedi p. 26*
Portata nominale	*530 Nl/min*
Valore conduttanza "C"	*2,17 Nl/s bar*
Rapporto critico delle pressioni "b"	*0,236*

VALVES AND SOLENOID VALVES G1/4 SERIES / *VALVOLE ED ELETTROVALVOLE SERIE G1/4*

Port connections	G1/4
Pilot connections	G1/8
Flow section	Ø 8 mm
Environment temperature range	-10 °C ÷ +50 °C
Temperature range of medium	0 °C ÷ +40 °C
Lubrication	Not required
Medium	Filtered air
Reference temperature	+20 °C
Reference pressure	6 bar

3/2 VALVES AND SOLENOID VALVES

Fixing	n°3 holes Ø 4,25 manifold system see p. 27.
Nominal air flow	1080 Nl/min
Fluid conductance "C"	4,34 Nl/s bar
Critical pressure ratio "b"	0,212

5/2 VALVES AND SOLENOID VALVES

Fixing	n°3 holes Ø 4,25 manifold system pp. 24 ÷ 25, 27.
Nominal air flow	1080 Nl/min
Fluid conductance "C"	4,34 Nl/s bar
Critical pressure ratio "b"	0,212

5/3 VALVES AND SOLENOID VALVES

Fixing	n°3 holes Ø 4,25 manifold system pp. 24 ÷ 25, 27.
Nominal air flow	800 Nl/min
Fluid conductance "C"	3,22 Nl/s bar
Critical pressure ratio "b"	0,265

Connessioni di lavoro	***G1/4***
Connessioni operatori	*G 1/8*
Diametro nominale	*Ø 8 mm*
Temperatura ambiente	*-10 °C ÷ +50 °C*
Temperatura fluido	*0 °C ÷ +40 °C*
Lubrificazione	*Non necessaria*
Fluido	*Aria filtrata*
Temperatura nominale	*+20 °C*
Pressione nominale	*6 bar*

VALVOLE ED ELETTROVALVOLE 3/2

Fissaggio	*n°3 fori laterali Ø 4,25 su collettore vedi p. 27*
Portata nominale	*1080 Nl/min*
Valore conduttanza "C"	*4,34 Nl/s bar*
Rapporto critico delle pressioni "b"	*0,212*

VALVOLE ED ELETTROVALVOLE 5/2

Fissaggio su base vedi pp. 24 ÷ 25	*n°3 fori laterali Ø 4,25 su collettore vedi p. 27*
Portata nominale	*1080 Nl/min*
Valore conduttanza "C"	*4,34 Nl/s bar*
Rapporto critico delle pressioni "b"	*0,212*

VALVOLE ED ELETTROVALVOLE 5/3

Fissaggio su base vedi pp. 24 ÷ 25	*n°3 fori laterali Ø 4,25 su collettore vedi p. 27*
Portata nominale	*800 Nl/min*
Valore conduttanza "C"	*3,22 Nl/s bar*
Rapporto critico delle pressioni "b"	*0,265*

VALVES AND SOLENOID VALVES G1/2 SERIES / *VALVOLE ED ELETTROVALVOLE SERIE G1/2*

Port connections	G1/2
Pilot connections	G1/8
Flow section	Ø 15 mm
Environment temperature range	-10 °C ÷ +50 °C
Temperature range of medium	0 °C ÷ +40 °C
Lubrication	Not required
Medium	Filtered air
Reference temperature	+20 °C
Reference pressure	6 bar

3/2 VALVES AND SOLENOID VALVES

Fixing	n°3 holes Ø 5,5
Nominal air flow	3500 Nl/min
Fluid conductance "C"	12,88 Nl/s bar
Critical pressure ratio "b"	0,393

5/2 VALVES AND SOLENOID VALVES

Fixing	n°3 holes Ø 5,5
Nominal air flow	3500 Nl/min
Fluid conductance "C"	12,88 Nl/s bar
Critical pressure ratio "b"	0,396

5/3 VALVES AND SOLENOID VALVES

Fixing	n°3 holes Ø 5,5
Nominal air flow	3000 Nl/min
Fluid conductance "C"	10,76 Nl/s bar
Critical pressure ratio "b"	0,42

Connessioni di lavoro	***G1/2***
Connessioni operatori	*G 1/8*
Diametro nominale	*Ø 15 mm*
Temperatura ambiente	*-10 °C ÷ +50 °C*
Temperatura fluido	*0 °C ÷ +40 °C*
Lubrificazione	*Non necessaria*
Fluido	*Aria filtrata*
Temperatura nominale	*+20 °C*
Pressione nominale	*6 bar*

VALVOLE ED ELETTROVALVOLE 3/2

Fissaggio	*n°3 fori laterali Ø 5,5*
Portata nominale	*3500 Nl/min*
Valore conduttanza "C"	*12,88 Nl/s bar*
Rapporto critico delle pressioni "b"	*0,393*

VALVOLE ED ELETTROVALVOLE 5/2

Fissaggio	*n°3 fori laterali Ø 5,5*
Valore conduttanza "C"	*12,88 Nl/s bar*
Rapporto critico delle pressioni "b"	*0,396*

VALVOLE ED ELETTROVALVOLE 5/3

Fissaggio	*n°3 fori laterali Ø 5,5*
Portata nominale	*800 Nl/min*
Valore conduttanza "C"	*3,22 Nl/s bar*
Rapporto critico delle pressioni "b"	*0,265*

PNEUMATIC VALVES FEATURES / CARATTERISTICHE *VALVOLE PNEUMATICHE*

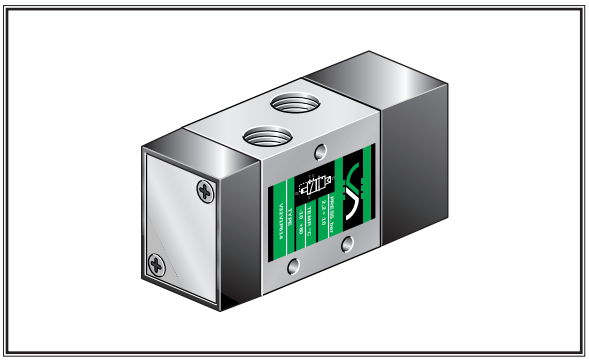
Size *Taglia*	Code *Codice*	Nominal pilot pressure (bar) *Pressione di pilotaggio nominale (bar)*	Nominal max frequence (Hz) *Frequenza max nominale (Hz)*	Operating pressure range (bar) *Pressione di esercizio (bar)*
G 1/8”	V32V1P618	4,5 bar (10 bar)	31 Hz	2,2 ÷ 10 bar
	V32V1P918	4,5 bar (10 bar)	31 Hz	2,2 ÷ 10 bar
	V32V1P6M8	2,7 bar	13 Hz	1,5 ÷ 10 bar
	V32V1P9M8	2,7 bar	13 Hz	1,5 ÷ 10 bar
	V32V2P018	1,3 bar	43 Hz	1,2 ÷ 10 bar
	V52V1P018	4,5 bar (10 bar)	30 Hz	2,5 ÷ 10 bar
	V52V1PM18	2,7 bar	13 Hz	1,5 ÷ 10 bar
	V52V2P018	1,3 bar	42 Hz	1,5 ÷ 10 bar
	V52V2PD18	1,3 bar	42 Hz	1,5 ÷ 10 bar
	V53V2P618	3,2 bar	9 Hz	1,5 ÷ 10 bar
	V53V2P918	3,2 bar	9 Hz	1,5 ÷ 10 bar
G 1/4”	V32V1P614	4 bar (10 bar)	22 Hz	2,2 ÷ 10 bar
	V32V1P914	4 bar (10 bar)	22 Hz	2,2 ÷ 10 bar
	V32V1P6M4	2,85 bar	11 Hz	1,5 ÷ 10 bar
	V32V1P9M4	2,85 bar	11 Hz	1,5 ÷ 10 bar
	V32V2P014	1,3 bar	31 Hz	1,2 ÷ 10 bar
	V52V1P014	4 bar (10 bar)	21 Hz	2,5 ÷ 10 bar
	V52V1PM14	2,85 bar	10 Hz	1,5 ÷ 10 bar
	V52V2P014	1,3 bar	30 Hz	1,5 ÷ 10 bar
	V52V2PD14	1,3 bar	30 Hz	1,5 ÷ 10 bar
	V53V2P614	3,6 bar	8 Hz	1,5 ÷ 10 bar
	V53V2P914	3,6 bar	8 Hz	1,5 ÷ 10 bar
G 1/2”	V32V1P612	4 bar (10 bar)	12 Hz	2,2 ÷ 10 bar
	V32V1P912	4 bar (10 bar)	12 Hz	2,2 ÷ 10 bar
	V32V1P6M2	2,85 bar	8 Hz	1,5 ÷ 10 bar
	V32V1P9M2	2,85 bar	8 Hz	1,5 ÷ 10 bar
	V32V2P012	1,3 bar	14 Hz	1,2 ÷ 10 bar
	V52V1P012	4 bar (10 bar)	12 Hz	2,5 ÷ 10 bar
	V52V1PM12	2,85 bar	7 Hz	1,5 ÷ 10 bar
	V52V2P012	1,3 bar	13 Hz	1,5 ÷ 10 bar
	V53V2P612	3,2 bar	6 Hz	1,5 ÷ 10 bar
	V53V2P912	3,2 bar	6 Hz	1,5 ÷ 10 bar

SOLENOID VALVES FEATURES / CARATTERISTICHE *ELETTROVALVOLE*

Size *Taglia*	Code *Codice*	Average actioning response (ms) *Tempo medio di risposta in eccitazione (ms)* AC	DC	Average disactioning response (ms) *Tempo medio di risposta in diseccitazione (ms)* AC	DC	Nominal max frequence (Hz) *Frequenza max nominale (Hz)* AC	DC	Operating pressure range (bar) *Pressione di esercizio (bar)*
G 1/8”	E32W1S618	17 ms	19 ms	20 ms	24 ms	29 Hz	18 Hz	2,2 ÷ 10 bar
	E32W1S918	17 ms	19 ms	20 ms	24 ms	29 Hz	18 Hz	2,2 ÷ 10 bar
	E32W1S6M8	17 ms	19 ms	21 ms	34 ms	13 Hz	13 Hz	3,2 ÷ 10 bar
	E32W1S9M8	17 ms	19 ms	21 ms	34 ms	13 Hz	13 Hz	3,2 ÷ 10 bar
	E32W2S018	10 ms	12 ms	10 ms	12 ms	31 Hz	23 Hz	1,2 ÷ 10 bar
	E52W1S018	10 ms	17 ms	20 ms	24 ms	29 Hz	17 Hz	2,5 ÷ 10 bar
	E52W1SM18	17 ms	19 ms	21 ms	34 ms	13 Hz	13 Hz	3,2 ÷ 10 bar
	E52W2S018	10,5 ms	12,5 ms	10,5 ms	12,5 ms	31 Hz	22 Hz	1,5 ÷ 10 bar
	E53W2S618	16 ms	19 ms	16 ms	19 ms	9 Hz	9 Hz	3 ÷ 10 bar
	E53W2S918	16 ms	19 ms	16 ms	19 ms	9 Hz	9 Hz	3 ÷ 10 bar
G 1/4”	E32W1S614	18 ms	21 ms	33 ms	44 ms	17 Hz	14 Hz	2,2 ÷ 10 bar
	E32W1S914	18 ms	21 ms	33 ms	44 ms	17 Hz	14 Hz	2,2 ÷ 10 bar
	E32W1S6M4	19 ms	21 ms	35 ms	46 ms	11 Hz	11 Hz	2,5 ÷ 10 bar
	E32W1S9M4	19 ms	21 ms	35 ms	46 ms	11 Hz	11 Hz	2,5 ÷ 10 bar
	E32W2S014	11 ms	14 ms	11 ms	14 ms	27 Hz	22 Hz	1,2 ÷ 10 bar
	E52W1S014	18 ms	21 ms	33 ms	44 ms	16 Hz	13 Hz	2,5 ÷ 10 bar
	E52W1SM14	19 ms	21 ms	35 ms	46 ms	11 Hz	11 Hz	2,5 ÷ 10 bar
	E52W2S014	11 ms	14 ms	11 ms	14 ms	27 Hz	21 Hz	1,5 ÷ 10 bar
	E53W2S614	17 ms	20 ms	17 ms	20 ms	8 Hz	8 Hz	3 ÷ 10 bar
	E53W2S914	17 ms	20 ms	17 ms	20 ms	8 Hz	8 Hz	3 ÷ 10 bar
G 1/2”	E32W1S612	43 ms	45 ms	55 ms	55 ms	13 Hz	12 Hz	2,2 ÷ 10 bar
	E32W1S912	43 ms	45 ms	55 ms	55 ms	13 Hz	12 Hz	2,2 ÷ 10 bar
	E32W1S6M2	47 ms	49 ms	60 ms	60 ms	8 Hz	8 Hz	2,5 ÷ 10 bar
	E32W1S9M2	47 ms	49 ms	60 ms	60 ms	8 Hz	8 Hz	2,5 ÷ 10 bar
	E32W2S012	22 ms	26 ms	22 ms	26 ms	16 Hz	15 Hz	1,2 ÷ 10 bar
	E52W1S012	47 ms	49 ms	58 ms	58 ms	11 Hz	10 Hz	2,5 ÷ 10 bar
	E52W1SM12	47 ms	49 ms	60 ms	60 ms	8 Hz	8 Hz	2,5 ÷ 10 bar
	E52W2S012	24 ms	28 ms	24 ms	28 ms	14 Hz	13 Hz	1,5 ÷ 10 bar
	E53W2S612	49 ms	49 ms	60 ms	60 ms	6 Hz	6 Hz	3 ÷ 10 bar
	E53W2S912	49 ms	49 ms	60 ms	60 ms	6 Hz	6 Hz	3 ÷ 10 bar

For electrical features solenoid pilot see pp. B-29 and B-31.
Caratteristiche elettriche elettrovalvole per solenoide vedi pp. B-29 e B-31.

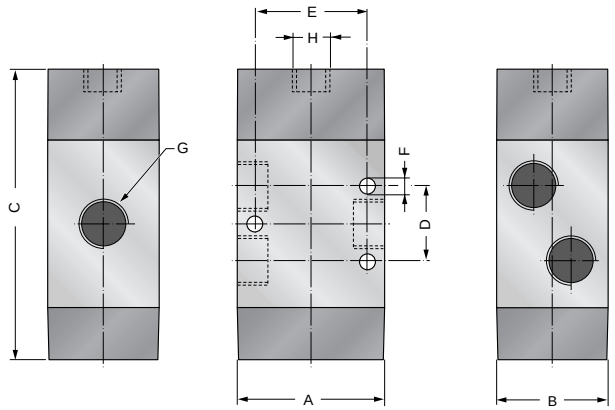
V32V1P . 1.



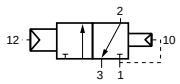
VALVE / *VALVOLA* 3/2

SINGLE PNEUMATIC PILOT - INTERNAL PRESSURE RETURN

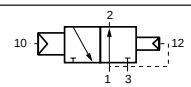
COMANDO PNEUMATICO - RIPOSIZIONAMENTO A MOLLA PNEUMATICA



SIMBOLS / *SIMBOLI*

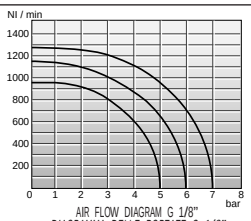


V32V1P61.



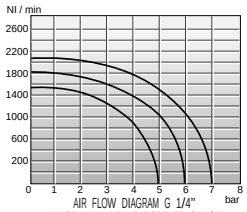
V32V1P91.

DIAGRAMS / *DIAGRAMMI*



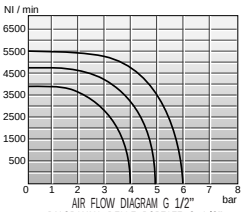
AIR FLOW DIAGRAM G 1/8"

DIAGRAMMA DELLE PORTATE G 1/8"



AIR FLOW DIAGRAM G 1/4"

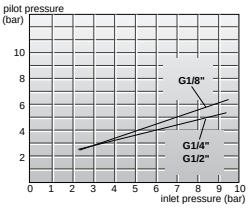
DIAGRAMMA DELLE PORTATE G 1/4"



AIR FLOW DIAGRAM G 1/2"

DIAGRAMMA DELLE PORTATE G 1/2"

DIAGRAM / *DIAGRAMMA*

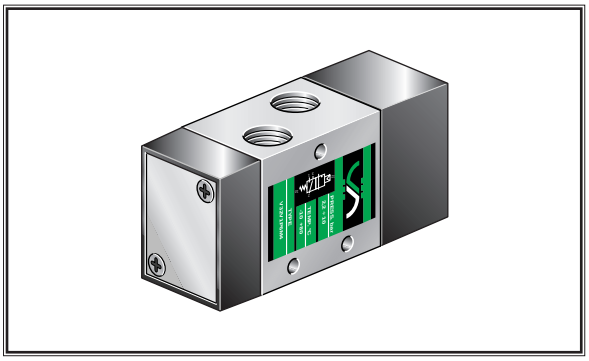


PILOT PRESSURE

DIAGRAMMA DELLA PRESSIONE DI PILOTAGGIO

Size *Taglia*	A	B	C	D	E	ØF	G	H
G1/8	30	26	74	18	23	4,25	G1/8	G1/8
G1/4	40	30	81,5	20	30	4,25	G1/4	G1/8
G1/2	60	40	127	40	50	5,5	G1/2	G1/8

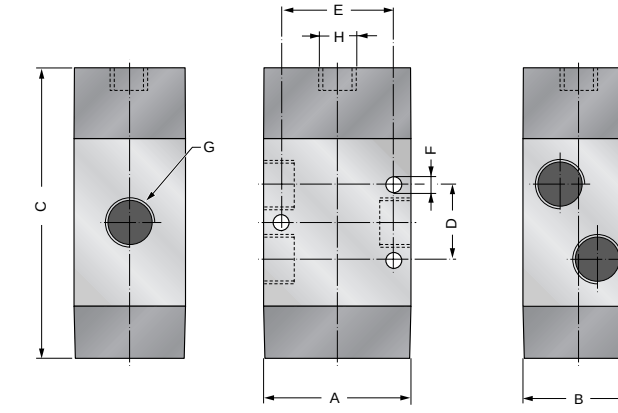
V32V1P . M.



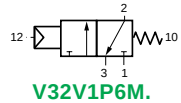
VALVE / *VALVOLA* 3/2

SINGLE PNEUMATIC PILOT - SPRING RETURN

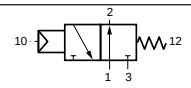
COMANDO PNEUMATICO - RIPOSIZIONAMENTO A MOLLA MECCANICA



SIMBOLS / *SIMBOLI*

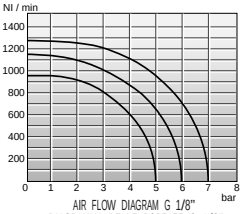


V32V1P6M.



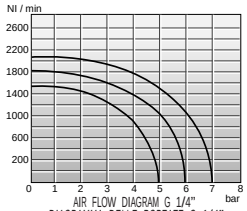
V32V1P9M.

DIAGRAMS / *DIAGRAMMI*



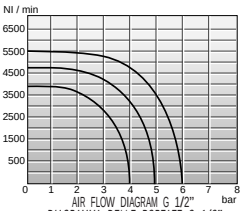
AIR FLOW DIAGRAM G 1/8"

DIAGRAMMA DELLE PORTATE G 1/8"



AIR FLOW DIAGRAM G 1/4"

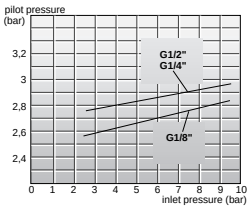
DIAGRAMMA DELLE PORTATE G 1/4"



AIR FLOW DIAGRAM G 1/2"

DIAGRAMMA DELLE PORTATE G 1/2"

DIAGRAM / *DIAGRAMMA*



PILOT PRESSURE

DIAGRAMMA DELLA PRESSIONE DI PILOTAGGIO

Size *Taglia*	A	B	C	D	E	ØF	G	H
G1/8	30	26	74	18	23	4,25	G1/8	G1/8
G1/4	40	30	81,5	20	30	4,25	G1/4	G1/8
G1/2	60	40	118	40	50	5,5	G1/2	G1/8

VALVE / VALVOLA 3/2

DOUBLE PNEUMATIC PILOT / *DOPPIO COMANDO PNEUMATICO*

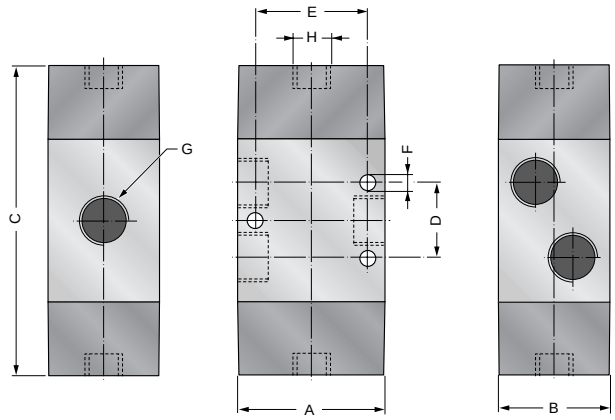
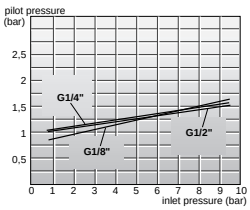


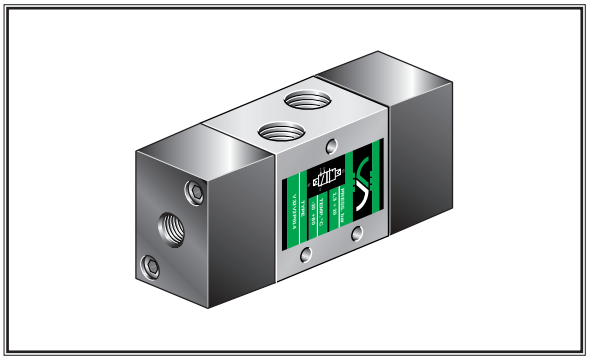
DIAGRAM / *DIAGRAMMA*



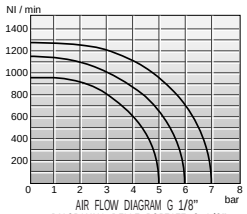
PILOT PRESSURE
DIAGRAMMA DELLA PRESSIONE DI PILOTAGGIO

Size *Taglia*	A	B	C	D	E	ØF	G	H
G1/8	30	26	79	18	23	4,25	G1/8	G1/8
G1/4	40	30	87	20	30	4,25	G1/4	G1/8
G1/2	60	40	132	40	50	5,5	G1/2	G1/8

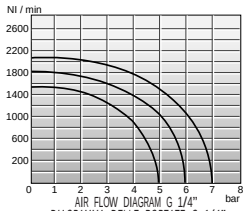
V32V2P01.



DIAGRAMS / *DIAGRAMMI*

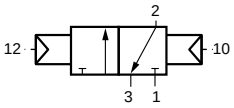


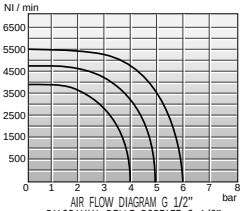
AIR FLOW DIAGRAM G 1/8"
DIAGRAMMA DELLE PORTATE G 1/8"



AIR FLOW DIAGRAM G 1/4"
DIAGRAMMA DELLE PORTATE G 1/4"

SIMBOL / *SIMBOLO*





AIR FLOW DIAGRAM G 1/2"
DIAGRAMMA DELLE PORTATE G 1/2"

VALVE / VALVOLA 5/2

SINGLE PNEUMATIC PILOT / *COMANDO PNEUMATICO*

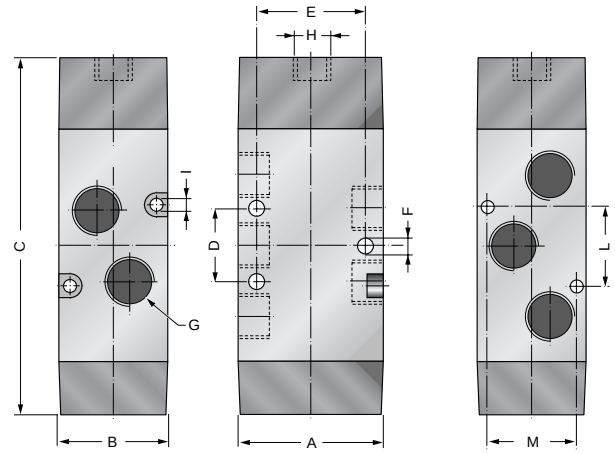
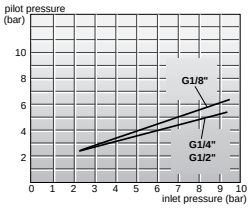


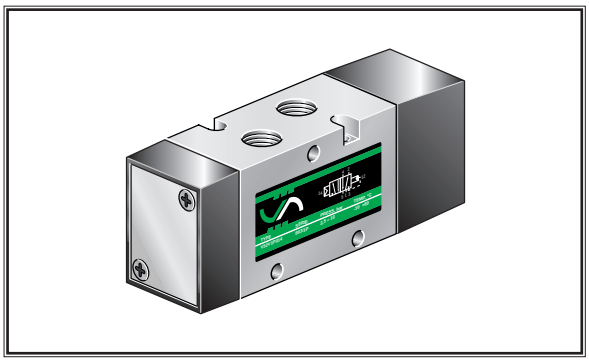
DIAGRAM / *DIAGRAMMA*



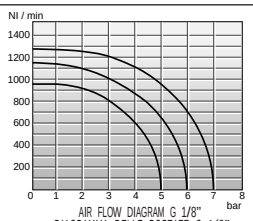
PILOT PRESSURE
DIAGRAMMA DELLA PRESSIONE DI PILOTAGGIO

Size *Taglia*	A	B	C	D	E	ØF	G	H	ØI	L	M
1/8	30	26	91	18	23	4,25	G1/8	G1/8	3,25	28,6	20
1/4	40	30	100	20	30	4,25	G1/4	G1/8	3,25	21	24,6
1/2	60	40	167	40	50	5,5	G1/2	G1/8	—	—	—

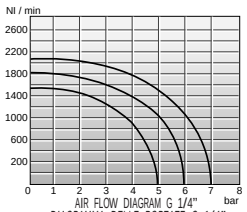
V52V1P . 1.



DIAGRAMS / *DIAGRAMMI*

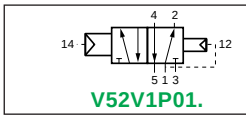


AIR FLOW DIAGRAM G 1/8"
DIAGRAMMA DELLE PORTATE G 1/8"

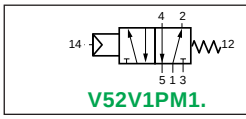


AIR FLOW DIAGRAM G 1/4"
DIAGRAMMA DELLE PORTATE G 1/4"

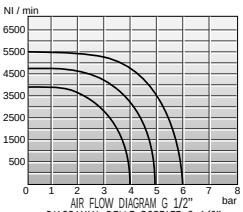
SIMBOLI / *SIMBOLI*



V52V1P01.

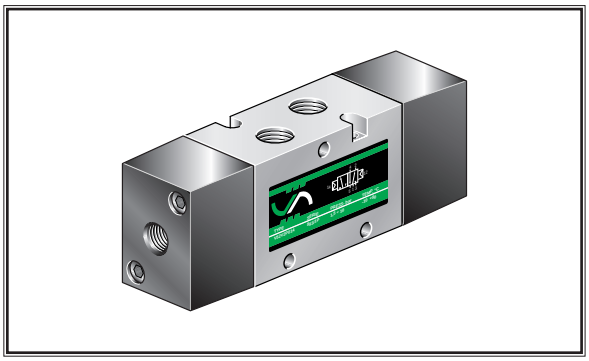


V52V1PM1.

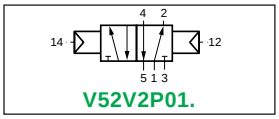


AIR FLOW DIAGRAM G 1/2"
DIAGRAMMA DELLE PORTATE G 1/2"

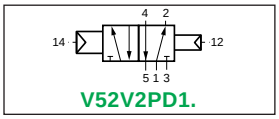
V52V2P . 1.



SIMBOLS / *SIMBOLI*

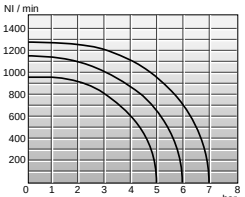


V52V2P01.

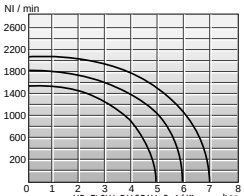


V52V2PD1.

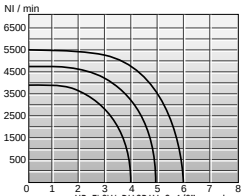
DIAGRAMS / *DIAGRAMMI*



AIR FLOW DIAGRAM G 1/8"
DIAGRAMMA DELLE PORTATE G 1/8"



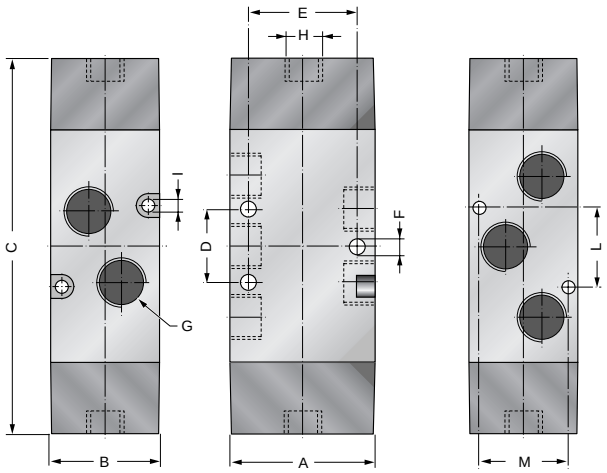
AIR FLOW DIAGRAM G 1/4"
DIAGRAMMA DELLE PORTATE G 1/4"



AIR FLOW DIAGRAM G 1/2"
DIAGRAMMA DELLE PORTATE G 1/2"

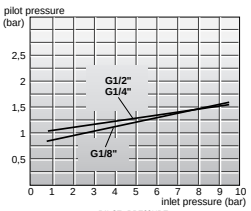
VALVE / *VALVOLA* 5/2

DOUBLE PNEUMATIC PILOT / *DOPPIO COMANDO PNEUMATICO*



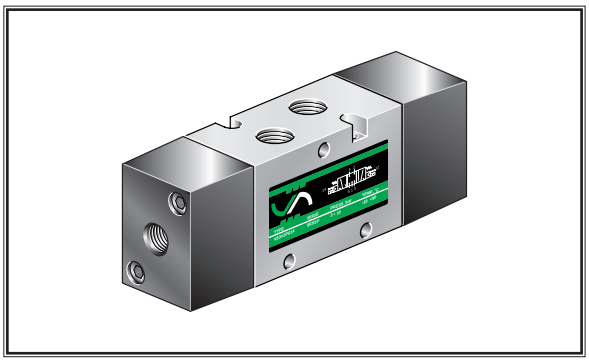
Size *Taglia*	A	B	C	D	E	ØF	G	H	ØI	L	M
1/8	30	26	96	18	23	4,25	G1/8	G1/8	3,25	28,6	20
1/4	40	30	105	20	30	4,25	G1/4	G1/8	3,25	21	24,6
1/2	60	40	172	40	50	5,5	G1/2	G1/8	—	—	—

DIAGRAM / *DIAGRAMMA*

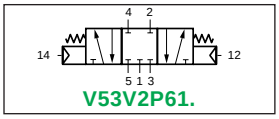


PILOT PRESSURE
DIAGRAMMA DELLA PRESSIONE DI PILOTAGGIO

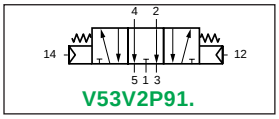
V53V2P . 1.



SIMBOLS / *SIMBOLI*

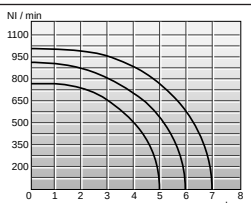


V53V2P61.

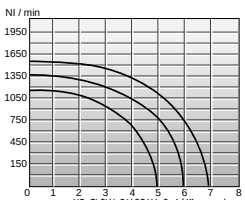


V53V2P91.

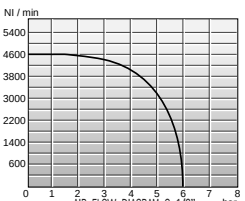
DIAGRAMS / *DIAGRAMMI*



AIR FLOW DIAGRAM G 1/8"
DIAGRAMMA DELLE PORTATE G 1/8"



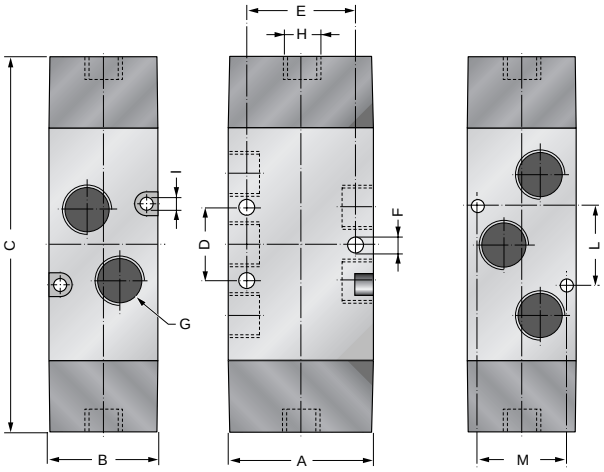
AIR FLOW DIAGRAM G 1/4"
DIAGRAMMA DELLE PORTATE G 1/4"



AIR FLOW DIAGRAM G 1/2"
DIAGRAMMA DELLE PORTATE G 1/2"

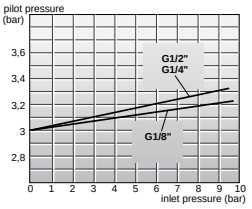
VALVE / *VALVOLA* 5/2

DOUBLE PNEUMATIC PILOT / *DOPPIO COMANDO PNEUMATICO*



Size *Taglia*	A	B	C	D	E	ØF	G	H	ØI	L	M
1/8	30	26	108	18	23	4,25	G1/8	G1/8	3,25	28,6	20
1/4	40	30	105	20	30	4,25	G1/4	G1/8	3,25	21	24,6
1/2	60	40	192	40	50	5,5	G1/2	G1/8	—	—	—

DIAGRAM / *DIAGRAMMA*

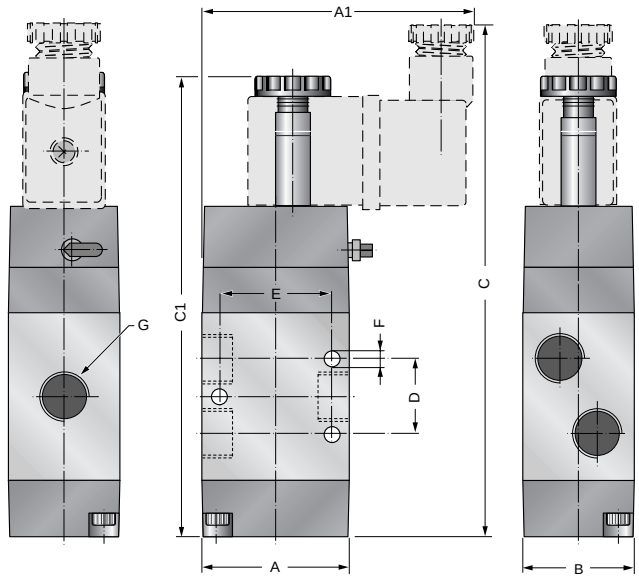


PILOT PRESSURE
DIAGRAMMA DELLA PRESSIONE DI PILOTAGGIO

SOLENOID VALVE / *ELETTROVALVOLA* 3/2

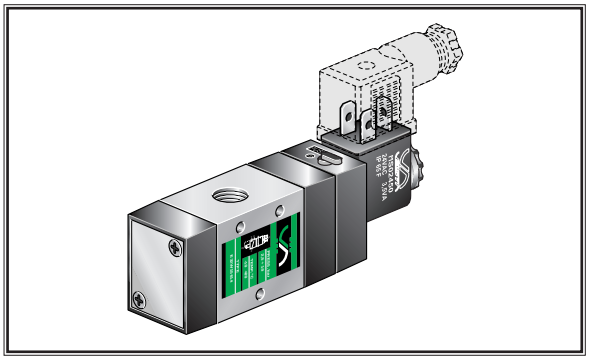
SINGLE SOLENOID VALVE - INTERNAL PRESSURE RETURN

COMANDO ELETTROPNEUMATICO - RIPOSIZIONAMENTO MOLLA PNEUMATICA

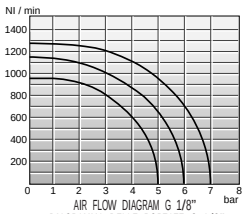


Size *Taglia*	A	A1	B	C	C1	D	E	ØF	G
1/8	30	63	26	133	119	18	23	4,25	G1/8
1/4	40	73	30	140	125	20	30	4,25	G1/4
1/2	60	60	40	181	167	40	50	5,5	G1/2

E32W1S . 1. - .....

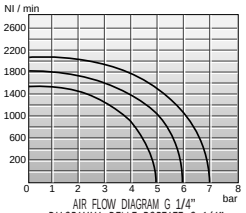


DIAGRAMS / *DIAGRAMMI*



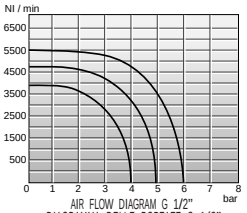
AIR FLOW DIAGRAM G 1/8"

DIAGRAMMA DELLE PORTATE G 1/8"



AIR FLOW DIAGRAM G 1/4"

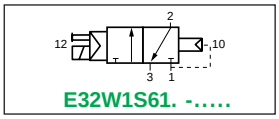
DIAGRAMMA DELLE PORTATE G 1/4"



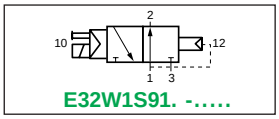
AIR FLOW DIAGRAM G 1/2"

DIAGRAMMA DELLE PORTATE G 1/2"

SIMBOLS / *SIMBOLI*



E32W1S61. -.....

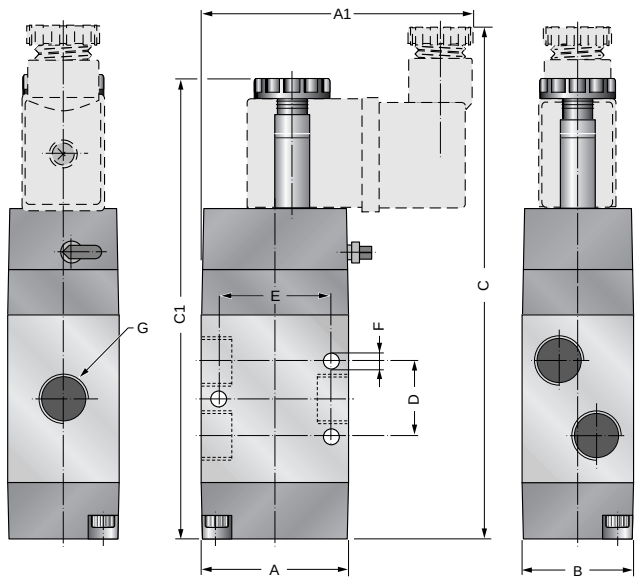


E32W1S91. -.....

SOLENOID VALVE / *ELETTROVALVOLA* 3/2

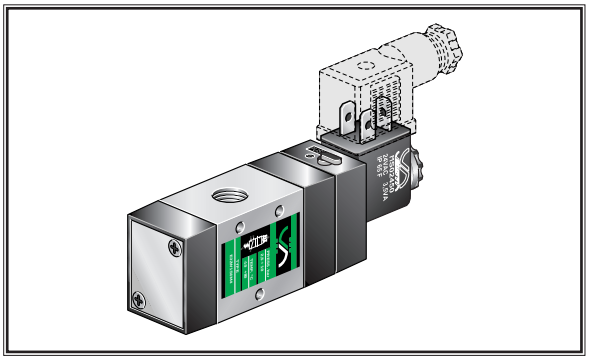
SINGLE SOLENOID VALVE - INTERNAL PRESSURE RETURN

COMANDO ELETTROPNEUMATICO - RIPOSIZIONAMENTO MOLLA PNEUMATICA

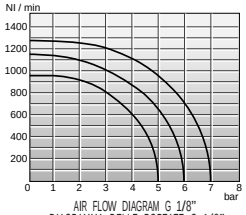


Size *Taglia*	A	A1	B	C	C1	D	E	ØF	G
1/8	30	63	26	133	119	18	23	4,25	G1/8
1/4	40	73	30	140	125	20	30	4,25	G1/4
1/2	60	60	40	172	158	40	50	5,5	G1/2

E32W1S . M. - .....

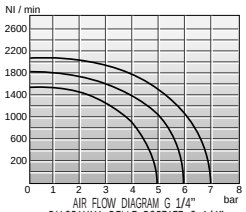


DIAGRAMS / *DIAGRAMMI*



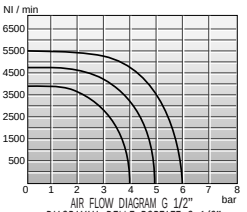
AIR FLOW DIAGRAM G 1/8"

DIAGRAMMA DELLE PORTATE G 1/8"



AIR FLOW DIAGRAM G 1/4"

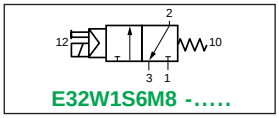
DIAGRAMMA DELLE PORTATE G 1/4"



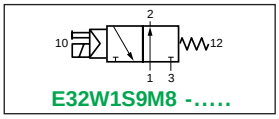
AIR FLOW DIAGRAM G 1/2"

DIAGRAMMA DELLE PORTATE G 1/2"

SIMBOLS / *SIMBOLI*

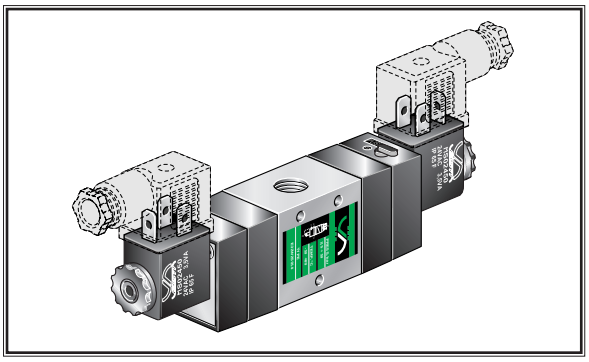


E32W1S6M8 -.....



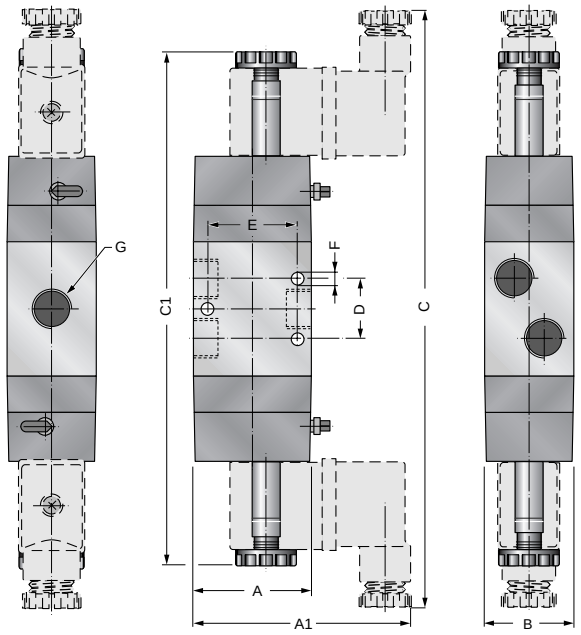
E32W1S9M8 -.....

E32W2S01. - .....



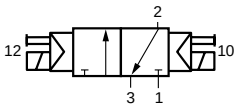
SOLENOID VALVE / *ELETTROVALVOLA* 3/2

DOUBLE SOLENOID VALVE / *DOPPIO COMANDO ELETTROPNEUMATICO*

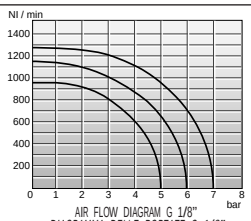


Size *Taglia*	A	A1	B	C	C1	D	E	ØF	G
1/8	30	63	26	197	169	18	23	4,25	G1/8
1/4	40	73	30	203	175	20	30	4,25	G1/4
1/2	60	60	40	240	212	40	50	5,5	G1/2

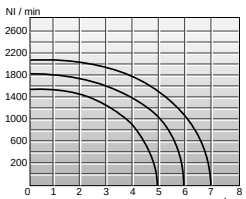
SIMBOL / *SIMBOLO*



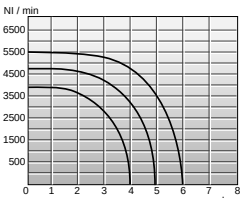
DIAGRAMS / *DIAGRAMMI*



AIR FLOW DIAGRAM G 1/8"
DIAGRAMMA DELLE PORTATE G 1/8"

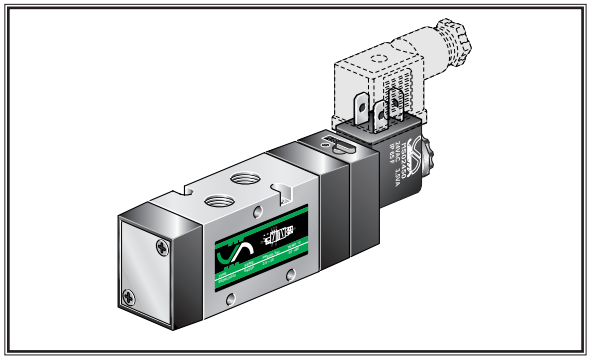


AIR FLOW DIAGRAM G 1/4"
DIAGRAMMA DELLE PORTATE G 1/4"



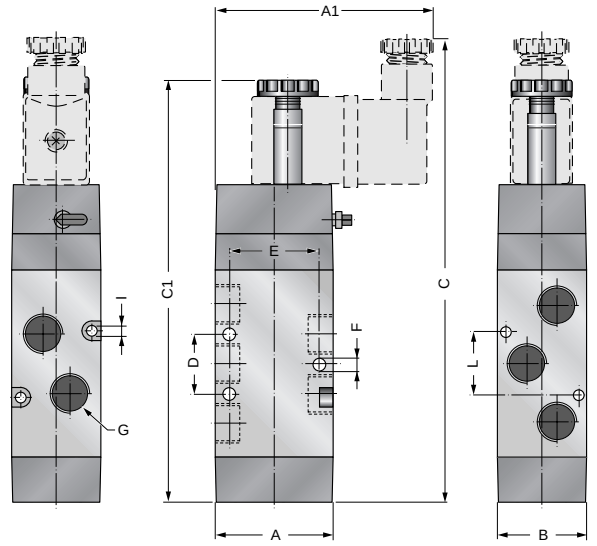
AIR FLOW DIAGRAM G 1/2"
DIAGRAMMA DELLE PORTATE G 1/2"

E52W1S . 1. - .....



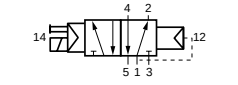
SOLENOID VALVE / *ELETTROVALVOLA* 3/2

DOUBLE SOLENOID VALVE / *DOPPIO COMANDO ELETTROPNEUMATICO*

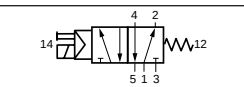


Size *Taglia*	A	A1	B	C	C1	D	E	ØF	G	ØI	L
1/8	30	63	26	150	136	18	23	4,25	G1/8	3,25	28,6
1/4	40	73	30	158	143	20	30	4,25	G1/4	3,25	21
1/2	60	60	40	221	207	40	50	5,5	G1/2	—	—

SIMBOLS / *SIMBOLI*

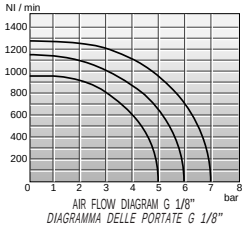


E52W1S01. -.....

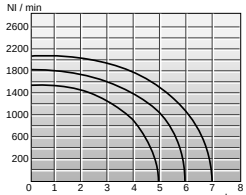


E52W1SM1. -.....

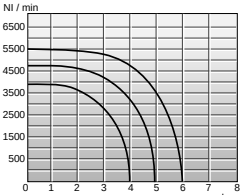
DIAGRAMS / *DIAGRAMMI*



AIR FLOW DIAGRAM G 1/8"
DIAGRAMMA DELLE PORTATE G 1/8"



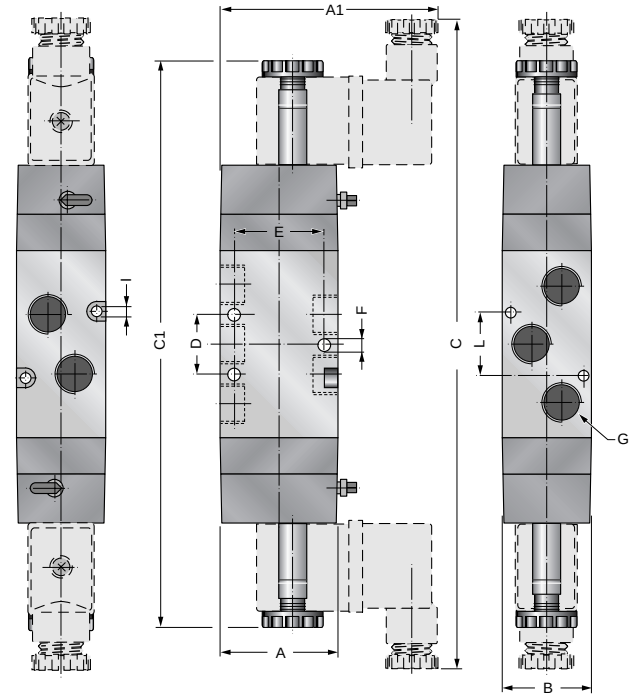
AIR FLOW DIAGRAM G 1/4"
DIAGRAMMA DELLE PORTATE G 1/4"



AIR FLOW DIAGRAM G 1/2"
DIAGRAMMA DELLE PORTATE G 1/2"

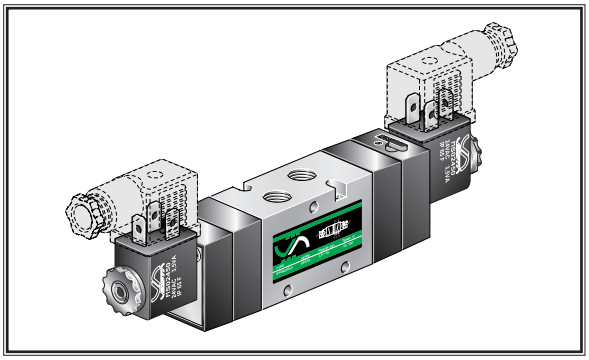
SOLENOID VALVE / *ELETTROVALVOLA* 5/2

DOUBLE SOLENOID VALVE / *DOPPIO COMANDO ELETTROPNEUMATICO*

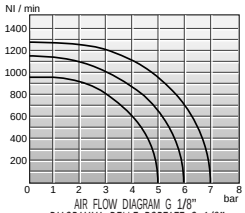


Size *Taglia*	A	A1	B	C	C1	D	E	ØF	G	ØI	L
1/8	30	63	26	215	186	18	23	4,25	G1/8	3,25	28,6
1/4	40	73	30	220	191	20	30	4,25	G1/4	3,25	21
1/2	60	60	40	280	252	40	50	5,5	G1/2	—	—

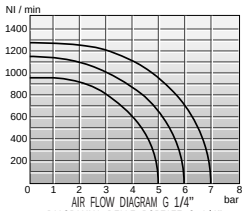
E52W2S01. - .....



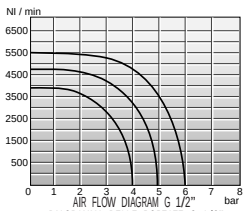
DIAGRAMS / *DIAGRAMMI*



AIR FLOW DIAGRAM G 1/8"
DIAGRAMMA DELLE PORTATE G 1/8"

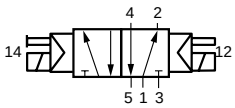


AIR FLOW DIAGRAM G 1/4"
DIAGRAMMA DELLE PORTATE G 1/4"



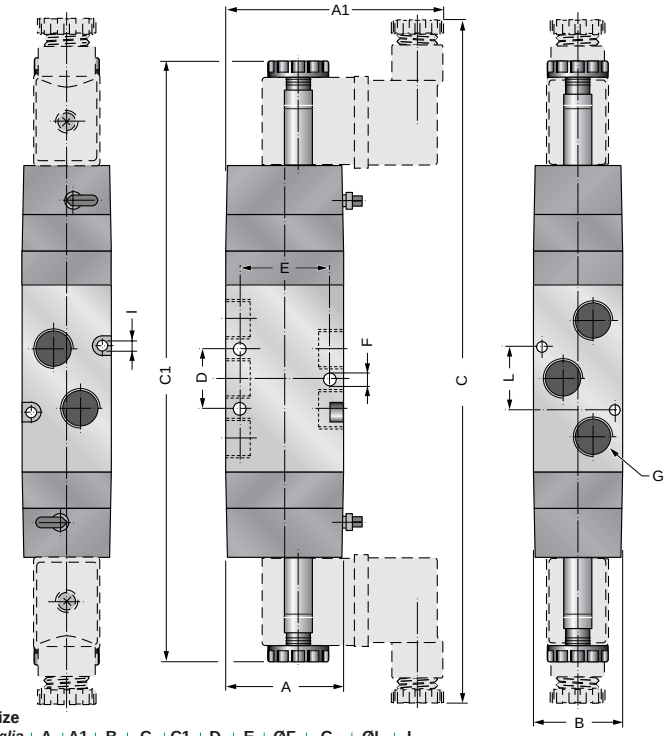
AIR FLOW DIAGRAM G 1/2"
DIAGRAMMA DELLE PORTATE G 1/2"

SIMBOL / *SIMBOLO*



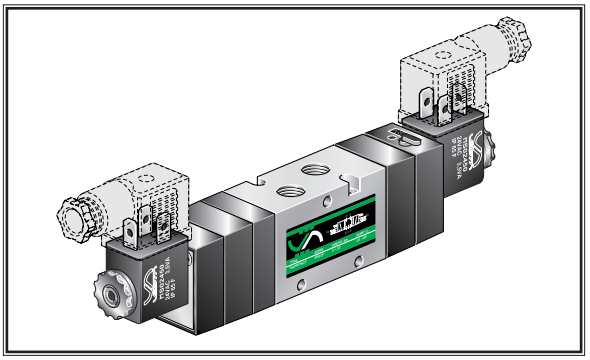
SOLENOID VALVE / *ELETTROVALVOLA* 5/3

DOUBLE SOLENOID VALVE / *DOPPIO COMANDO ELETTROPNEUMATICO*

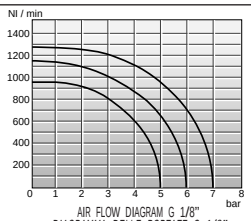


Size *Taglia*	A	A1	B	C	C1	D	E	ØF	G	ØI	L
1/8	30	63	26	227	198	18	23	4,25	G1/8	3,25	28,6
1/4	40	73	30	232	203	20	30	4,25	G1/4	3,25	21
1/2	60	60	40	280	252	40	50	5,5	G1/2	—	—

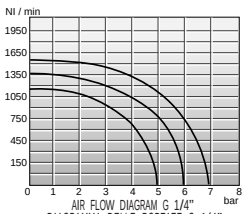
E53W2S . 1. - .....



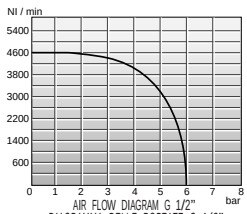
DIAGRAMS / *DIAGRAMMI*



AIR FLOW DIAGRAM G 1/8"
DIAGRAMMA DELLE PORTATE G 1/8"

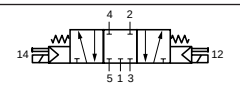


AIR FLOW DIAGRAM G 1/4"
DIAGRAMMA DELLE PORTATE G 1/4"

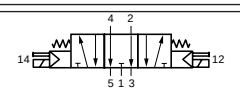


AIR FLOW DIAGRAM G 1/2"
DIAGRAMMA DELLE PORTATE G 1/2"

SIMBOLS / *SIMBOLI*

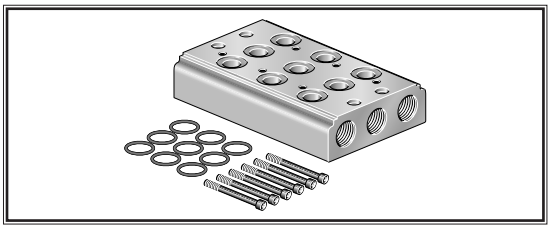


E53W2S614 -.....

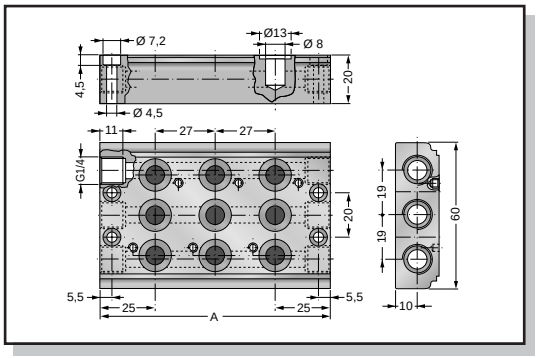


E53W2S914 -.....

ME .18 DOUBLE INLET MANIFOLD FOR ASSEMBLING VALVES AND SOLENOID VALVES G1/8
BASE A DOPPIO INGRESSO PER ASSEMBLAGGIO VALVOLE ED ELETTROVALVOLE G1/8



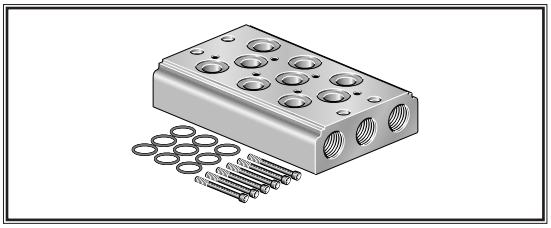
- Completly of gasket and screw for assembling valves on manifold .
- *Nella confezione sono presenti le guarnizioni e le viti per fissare le valvole alla base.*



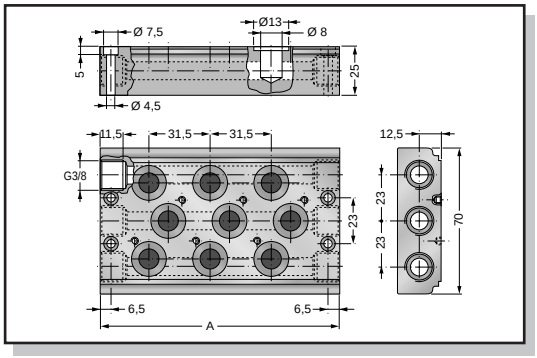
CODES / *CODICI*

Code *Codice*	A *A*	Place *Posti*
ME 218	77	2
ME 318	104	3
ME 418	131	4
ME 518	158	5
ME 618	185	6
ME 718	212	7
ME 818	239	8
ME 918	266	9
ME 1018	293	10

ME .14 DOUBLE INLET MANIFOLD FOR ASSEMBLING VALVES AND SOLENOID VALVES G1/4
BASE A DOPPIO INGRESSO PER ASSEMBLAGGIO VALVOLE ED ELETTROVALVOLE G1/4



- Completly of gasket and screw for assembling valves on manifold .
- *Nella confezione sono presenti le guarnizioni e le viti per fissare le valvole alla base.*

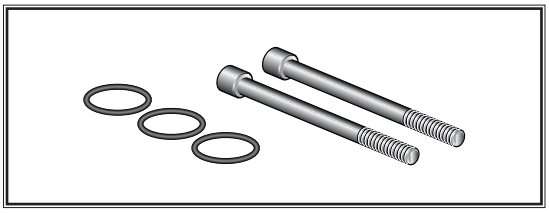


CODES / *CODICI*

Code *Codice*	A *A*	Place *Posti*
ME 214	91,5	2
ME 314	123,5	3
ME 414	154,5	4
ME 514	186,5	5
ME 614	217,5	6
ME 714	249,5	7
ME 814	280,5	8
ME 914	312,5	9
ME 1014	343,5	10

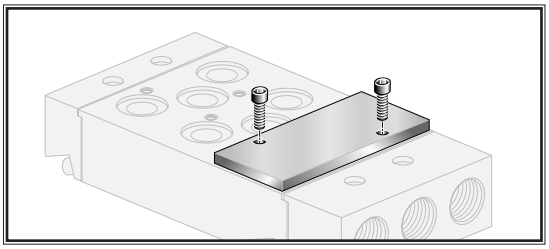
SEALS KIT AND ACCESSORIES FOR VALVES AND SOLENOID VALVES G 1/8 AND G 1/4
RICAMBI ED ACCESSORI PER VALVOLE ED ELETTROVALVOLE G 1/8 E G 1/4

KM 018 (G1/8) - KM 014 (G1/4) ASSEMBLING KIT / *KIT DI ASSEMBLAGGIO*

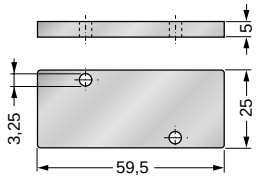


- Subbases are supplied with assembling screws and seals.
Kit of screws and seals can be supplied also as spare parts with the code **KM 018** and **KM 014**.
- Le basi sono complete delle viti e delle guarnizioni necessarie per il fissaggio delle valvole. Tuttavia può essere fornito come ricambio il kit **KM 018** *per il fissaggio di singole valvole da G1/8 oppure* **KM 014** *per il fissaggio di singole valvole da G1/4*

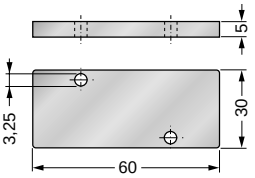
PCH 018 (G1/8) - PCH 014 (G1/4) PLUG-FLAT / *CHIUSURA POSTO INUTILIZZATO*



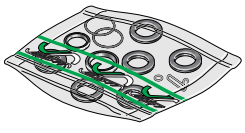
PCH 018



PCH 014



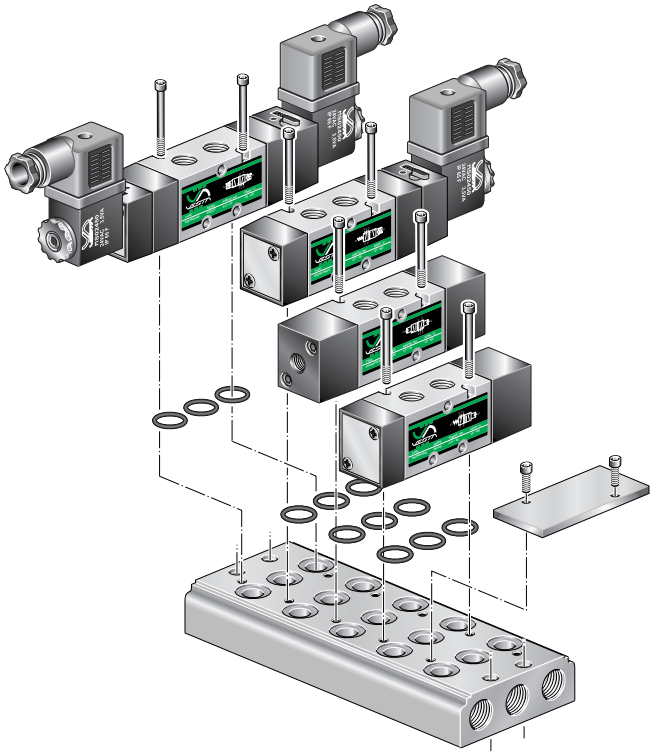
SET . 1/4 SG *SEALS KIT* / KIT GUARNIZIONI DI RICAMBIO

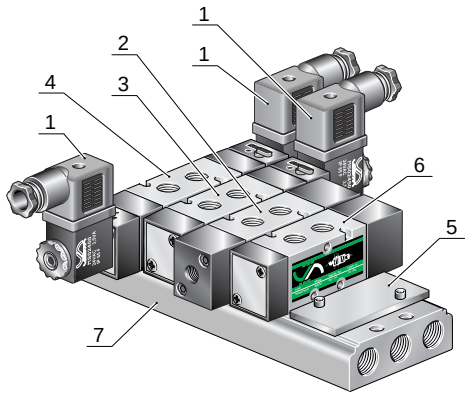


Seals kit code - *Codice del kit*
SET 1 1/4 SG: for G1/4 **mono-stable** valves - *per valvole* ***monostabili*** *G1/4.*
SET 2 1/4 SG: for G1/4 **bi-stable** valves - *per valvole* ***bistabili*** *G1/4*

Example / *Esempio:* **E52W1SM14-02400 ---> SET 1 1/4 SG** **E52W2S014-02400 ---> SET 2 1/4 SG**

EXAMPLE OF MODULAR ASSEMBLING VALVES AND SOLENOID VALVES G1/8
ESEMPIO DI ASSEMBLAGGIO MODULARE DI VALVOLE ED ELETTROVALVOLE G1/8

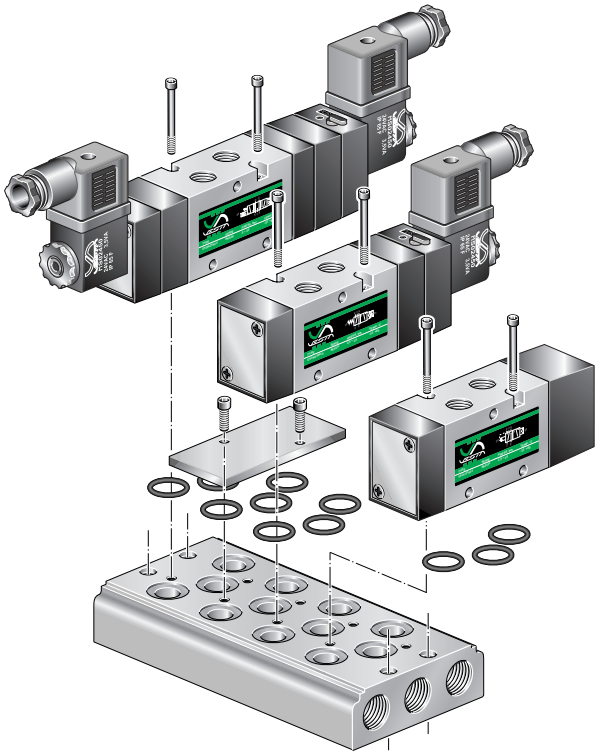


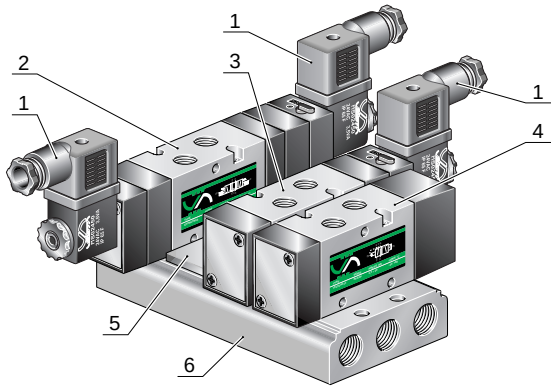


Components needed for assembling manifold on the picture.
Esempio di componenti necessari a realizzare la batteria raffigurata.

Position *Posizione*	**Quantity** *Quantità*	**Code** *Codice*
1	N° 3	**CEP/1**
2	N° 1	**V52V2P018**
3	N° 1	**E52W1S018 - 02450**
4	N° 1	**E52W2S018 - 02450**
5	N° 1	**PCH 018**
6	N° 1	**V52V1PM18**
7	N° 1	**ME 518**

EXAMPLE OF MODULAR ASSEMBLING VALVES AND SOLENOID VALVES G1/4
ESEMPIO DI ASSEMBLAGGIO MODULARE DI VALVOLE ED ELETTROVALVOLE G1/4





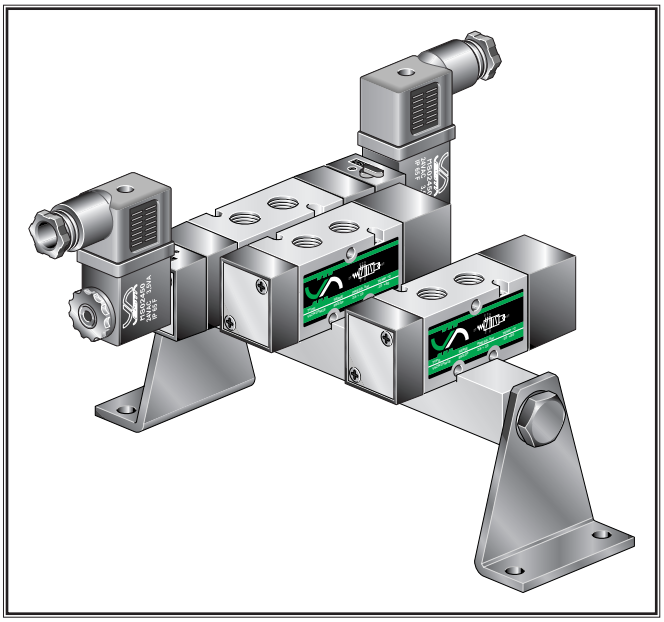
Components needed for assembling manifold on the picture.
Esempio di componenti necessari a realizzare la batteria raffigurata.

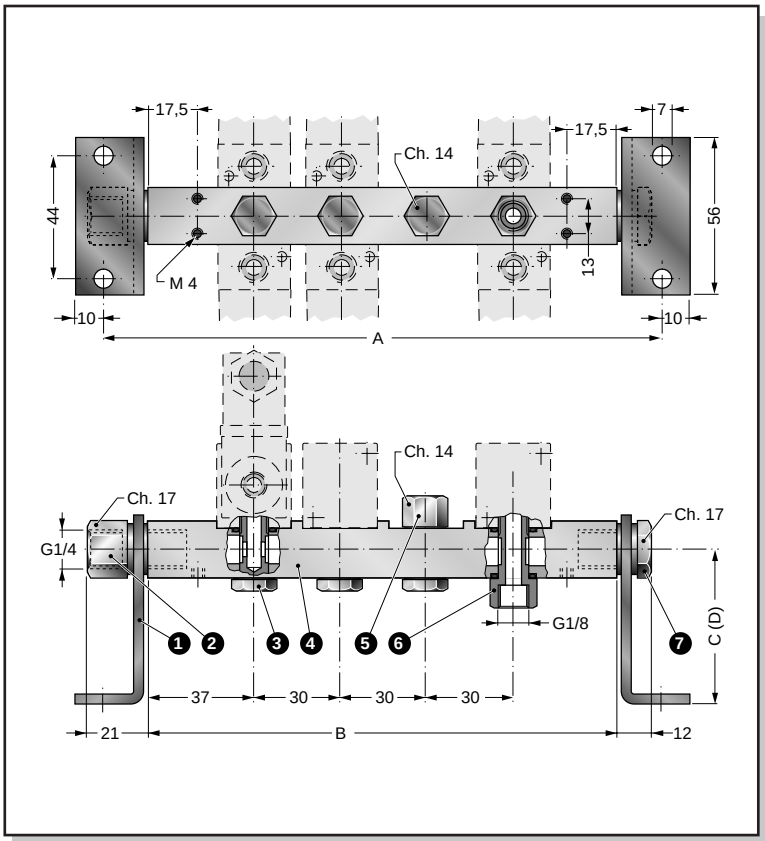
Position *Posizione*	**Quantity** *Quantità*	**Code** *Codice*
1	N° 3	**CEP/1**
2	N° 1	**E53W2S914 - 02450**
3	N° 1	**E52W1SM14 - 02450**
4	N° 1	**V52V1PM14**
5	N° 1	**PCH014**
6	N° 1	**ME 414**

MANIFOLD ASSEMBLING VALVES AND SOLENOID VALVES G1/8
ASSEMBLAGGIO SU COLLETTORE DELLE VALVOLE ED ELETTROVALVOLE G 1/8

RTCOV .18
SBCOV .18
SACOV .18

MANIFOLDS WITH COMMON INLET AIR FOR G1/8 VALVES / *COLLETTORI PER VALVOLE FILETTATE G1/8*





CODES / *CODICI*

Code *Codice*	A	B	C	D	Place *Posti*
ASSEMBLED MANIFOLD RT018 *WITH FITTINGS* COLLETTORE RT018 COMPLETO DI RACCORDI					
RTCOV218	-	104	-	-	2
RTCOV318	-	134	-	-	3
RTCOV418	-	164	-	-	4
RTCOV518	-	194	-	-	5
ASSEMBLED MANIFOLD RT018 WITH FITTINGS AND LOW SUPPORTS SB018 *COLLETTORE RT018 COMPLETO DI RACCORDI E SUPPORTI BASSI SB018*					
SBCOV218	134	104	72	-	2
SBCOV318	164	134	72	-	3
SBCOV418	194	164	72	-	4
SBCOV518	224	194	72	-	5
ASSEMBLED MANIFOLD RT018 WITH FITTINGS AND HIGH SUPPORTS SA018 *COLLETTORE RT018 COMPLETO DI RACCORDI E SUPPORTI ALTI SA018*					
SACOV218	134	104	-	125	2
SACOV318	164	134	-	125	3
SACOV418	194	164	-	125	4
SACOV518	224	194	-	125	5

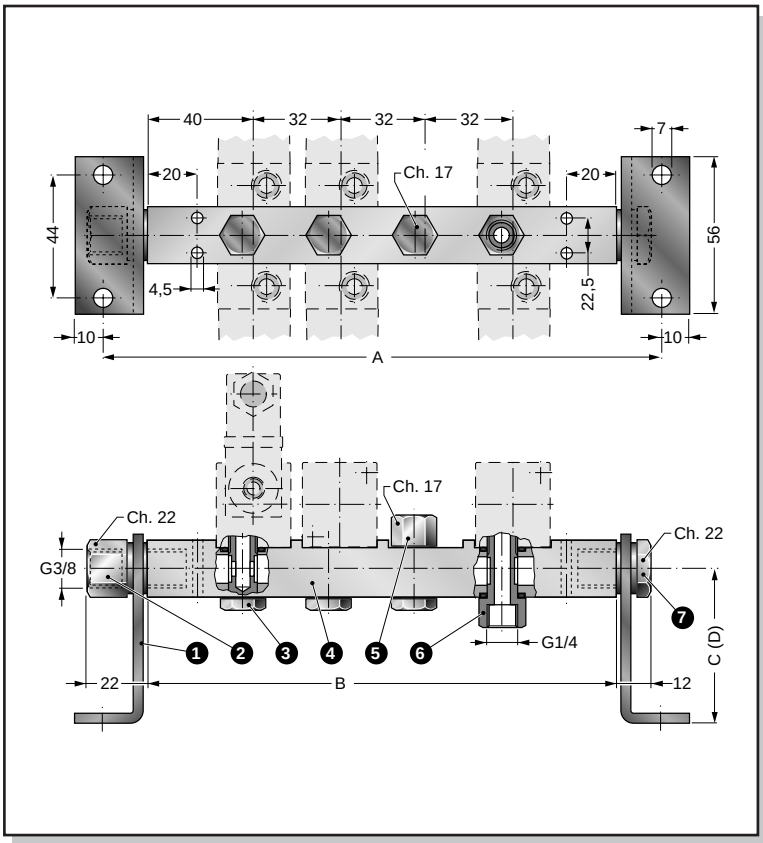
Position *Posizione*	Code *Codice*	Description *Descrizione*
1	SB018 (ref. C)	Low supports mounted "C" / *Supporto basso "C"*
	SA018 (ref. D)	High supports mounted "D" / *Supporto alto "D"*
2	RFS18	Fixing supports fitting with inlet air *Raccordo fissaggio supporto con connessione*
3	RT018	Fixing valve fitting *Raccordo fissaggio valvola*
4	COV218	Manifold 2 valves / *Collettore 2 valvole*
	COV318	Manifold 3 valves / *Collettore 3 valvole*
	COV418	Manifold 4 valves / *Collettore 4 valvole*
	COV518	Manifold 5 valves / *Collettore 5 valvole*
5	TF018	Closed fitting *Tappo chiusura raccordo*
6	RTP18	Fixing valve fitting with inlet air *Raccordo di fissaggio valvola passante*
7	RC018	Fixing supports fitting *Raccordo di chiusura collettore*

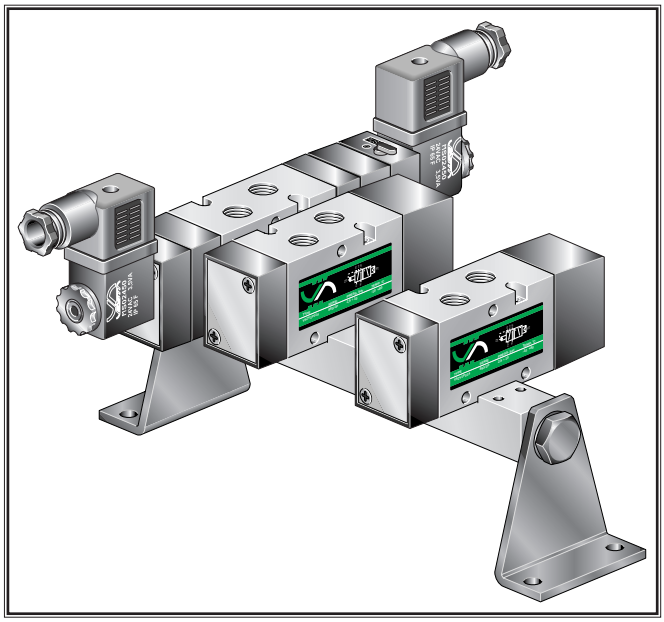
Maximum numbers of valves depends on: air consumption, number of valves contemporary in use user's air flow.
Fitting and supports are supplied with washers

Il numero massimo di valvole dipende dal consumo totale d'aria, da quante valvole vengono azionate contemporaneamente e dalla portata degli utilizzi collegati a valle. I raccordi di fissaggio valvole e supporti vengono forniti completi di rondelle di tenuta.

RTCOV .14
SBCOV .14
SACOV .14

MANIFOLDS WITH COMMON INLET AIR FOR G1/4 VALVES / *COLLETTORI PER VALVOLE FILETTATE G1/4*





Position *Posizione*	Code *Codice*	Description *Descrizione*
1	SB014 (ref. C)	Low supports mounted "C" / *Supporto basso "C"*
	SA014 (ref. D)	High supports mounted "D" / *Supporto alto "D"*
2	RFS14	Fixing supports fitting with inlet air *Raccordo fissaggio supporto con connessione*
3	RT014	Fixing valve fitting *Raccordo fissaggio valvola*
4	COV214	Manifold 2 valves / *Collettore 2 valvole*
	COV314	Manifold 3 valves / *Collettore 3 valvole*
	COV414	Manifold 4 valves / *Collettore 4 valvole*
	COV514	Manifold 5 valves / *Collettore 5 valvole*
5	TF014	Closed fitting *Tappo chiusura raccordo*
6	RTP14	Fixing valve fitting with inlet air *Raccordo di fissaggio valvola passante*
7	RC014	Fixing supports fitting *Raccordo di chiusura collettore*

CODES / *CODICI*

Code *Codice*	A	B	C	D	Place *Posti*
ASSEMBLED MANIFOLD RT014 WITH FITTINGS COLLETTORE RT014 COMPLETO DI RACCORDI					
RTCOV214	-	112	-	-	2
RTCOV314	-	144	-	-	3
RTCOV414	-	176	-	-	4
RTCOV514	-	208	-	-	5
ASSEMBLED MANIFOLD RT014 WITH FITTINGS AND LOW SUPPORTS SB014 *COLLETTORE RT014 COMPLETO DI RACCORDI E SUPPORTI BASSI SB014*					
SBCOV214	134	104	72	-	2
SBCOV314	164	134	72	-	3
SBCOV414	194	164	72	-	4
SBCOV514	224	194	72	-	5
ASSEMBLED MANIFOLD RT014 WITH FITTINGS AND HIGH SUPPORTS SA014 *COLLETTORE RT014 COMPLETO DI RACCORDI E SUPPORTI ALTI SA014*					
SACOV214	134	104	-	125	2
SACOV314	164	134	-	125	3
SACOV414	194	164	-	125	4
SACOV514	224	194	-	125	5

Maximum numbers of valves depends on: air consumption, number of valves contemporary in use user's air flow.
Fitting and supports are supplied with washers

Il numero massimo di valvole dipende dal consumo totale d'aria, da quante valvole vengono azionate contemporaneamente e dalla portata degli utilizzi collegati a valle. I raccordi di fissaggio valvole e supporti vengono forniti completi di rondelle di tenuta.